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AMENDMENT TO THE CLAIMS

1-30. (Cancelled)

31. (Currently amended) A method for forming a shallow junction ~~making a device,~~ comprising the steps of:

forming an amorphous layer at a shallow region in a silicon substrate by irradiating a plasma containing He ~~to a substrate~~; and

introducing boron by applying a plasma to the shallow region of the silicon substrate; and

applying light having an intensity peak at a wavelength of 375nm or longer on the silicon substrate so that said shallow region is excited selectively and the shallow junction is formed electrically activated with the boron

~~impurities into the substrate; and~~

~~irradiating an electromagnetic wave so as to electrically activate the impurities, wherein in the step of irradiating the plasma, an amorphous layer is formed by He plasma~~.

32. (Canceled)

33. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim 31 ~~or 32~~, wherein the plasma is ~~primarily~~ comprised mainly of He.

34. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim 31 ~~or 32~~, wherein the plasma ~~is comprised of only~~ consists of He.

35. (Canceled)

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36. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim 31 ~~or 32~~, wherein, assuming that wavelength is λ(nm) and light absorption ratio is A(%), the light absorption rate of a layer which is formed by introducing the boron ~~impurities~~ into the substrate satisfies at least one of following conditions:

at the wavelength ranging from 375 nm (inclusive) to 500 nm, $A > 7E32\lambda^{-12.316}$;

at the wavelength ranging from 500 nm (inclusive) to 600 nm, $A > 2E19\lambda^{-7.278}$;

at the wavelength ranging from 600 nm (inclusive) to 700 nm, $A > 4E14\lambda^{-5.5849}$; and

at the wavelength ranging from 700 nm (inclusive) to 800 nm, $A > 2E12\lambda^{-4.773}$.

37. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim 31 ~~or 32~~, wherein, assuming that wavelength is λ(nm) and absorption coefficient is α (cm^{-1}), the light absorption coefficient of a layer which is formed by introducing the ~~impurities~~ boron into the substrate satisfies at least one of following conditions:

at the wavelength ranging from 375 nm (inclusive) to 500 nm, $\alpha > 1E38\lambda^{-12.505}$;

at the wavelength ranging from 500 nm (inclusive) to 600 nm, $\alpha > 1E24\lambda^{-7.2684}$;

at the wavelength ranging from 600 nm (inclusive) to 700 nm, $\alpha > 2E19\lambda^{-5.5873}$; and

at the wavelength ranging from 700 nm (inclusive) to 800 nm, $\alpha > 1E17\lambda^{-4.7782}$.

38-39. (Canceled)

40. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim [[39]] 31, wherein the step of ~~irradiating the electromagnetic wave~~ applying

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light is a step of irradiating light having an intensity peak at wavelength longer than 375 nm (inclusive) and shorter than 800 nm (inclusive).

41. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim 40, wherein the light having the intensity peak at the wavelength longer than 375 nm (inclusive) and shorter than 800 nm (inclusive) is a xenon flash lamp light.

42. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim [[38]] 31, wherein the silicon substrate is a substrate having a (100) plane or the silicon substrate comprises a plane inclined from the (100) plane by several degrees.

43. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim [[38]] 31, wherein, assuming that wavelength is λ(nm) and absorption ratio is A (%), the light absorption ratio of a layer into which the boron is introduced for light having a wavelengths longer than 375 nm (inclusive) and shorter than 800 nm (inclusive) satisfies $A > 1E19\lambda^{-6.833}$.

44. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim [[38]] 31, wherein, assuming that wavelength is λ (nm) and absorption coefficient is α (cm^{-1}), the light absorption coefficient of a layer into which the boron is introduced to light having wavelengths longer than 375 nm (inclusive) and shorter than 800 nm (inclusive) satisfies $\alpha > 1E19\lambda^{-7.1693}$.

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45. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim 31 ~~or 32~~, wherein the step of introducing the boron ~~impurities~~ is a step of introducing the boron ~~impurities~~ by plasma doping.

46. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim 31 ~~or 32~~, wherein the substrate is a SOI substrate with a Silicon thin film formed on a surface thereof.

47. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim 31 ~~or 32~~, wherein the substrate is a strained Si substrate with a Si film formed on a surface thereof.

48. (Currently amended) The method for ~~making a junction~~ forming a shallow junction according to claim 31 ~~or 32~~, wherein the substrate is a glass substrate with a poly-Si thin film formed on a surface thereof.

49. (Currently amended) A processed material formed by the method for ~~making a junction~~ forming a shallow junction according to claim 31 ~~or 32~~.

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